

Notice of Allowability

Application No.

10/602,686

Examiner

Ehud Gartenberg

Applicant(s)

KOGANEZAWA ET AL.

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/29/2004.
2. ☒ The allowed claim(s) is/are 3,6,14 and 15.
3. ☒ The drawings filed on 25 June 2003 are accepted by the Examiner. *Except figs. 889, see below EB*
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Figs. 889 only.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 9/03/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gene Stockman on 10/28/04.

The application has been amended as follows:

The Abstract has been amended as per the attached marked Abstract, that is made part of this Office Action, in order to comply with the 15 lines / 150 words requested format.

Claims 1-2 and 4-5 have been canceled. New claims 14 and 15 have been added. Claims 3 and 6 have been amended.

Claim 14 (new). A process of making a gas turbine comprising the steps of:

Initially designing a principal part of a gas turbine including a multistage compressor and a multistage turbine, said principal part capable of being used for various thermodynamic cycles;

Setting for said principal part the number of stages of said compressor and said turbine that can operate a specific thermodynamic cycle, the number of either the compressor or the turbine stages being less than the initial design number;

Wherein a member having an outer periphery, that forms an inner peripheral wall of an annular flow passage of said compressor or said turbine replaces each compressor or turbine

stage omitted from the principal part such that said gas turbine operates according to said specific thermodynamic cycle; and

Making the principal part with the set number of compressor and turbine stages and said member.

Claim 3 has been amended as follows: on ll. 1-2 of the claim, "A production process of a gas turbine according to Claim 1" has been changed to -- A process of making a gas turbine according to claim 14, --.

Claim 15. (new) A gas turbine comprising a multistage compressor and a multistage turbine,

wherein a principal part comprising said compressor and said turbine is initially designed to be used in common for various thermodynamic cycles,

said compressor or said turbine each being made by combining a number of stages for a specific thermodynamic cycle with at least one disk-shaped member having an outer periphery that forms part of an inner peripheral wall of an annular flow passage of said compressor or said turbine, the number of either the compressor or the turbine stages being less than the initial design number; and

wherein said member replaces each stage omitted to reduce the number of initial stages of said compressor or said turbine, for the gas turbine to operate according to said specific thermodynamic cycle.

Claim 6 has been amended as follows: on l. 1 of the claim, "A gas turbine according to claim 4," has been changed to -- A gas turbine according to claim 15, --.

Drawings

Figures 8 and 9 have been amended as per the attached drawings to make the subject matter claimed conspicuous.

Allowable Subject Matter

2. Claims 3, 6, 14 and 15 are allowed.

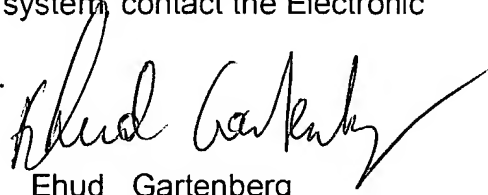
Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Berry 6,438,837, Aviation Week and Space Technology January 13, 1997, pp. 104, 114, General Electric Brochure for LM6000, Pratt & Whitney brochure for FT8. A comparison between the aircraft engines GE CF6-80C2 and P&W JT-8D and their power derivatives GE LM6000 and P&W FT8 respectively indicates the conservation of the number of stages, although the applications are significantly different.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ehud Gartenberg whose telephone number is 703/308-2634. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 703/306-2772. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ehud Gartenberg
Primary Examiner
Art Unit 3746

10282004